

Federal Judicial Center Survey on Courtroom Technology December 2003

Elizabeth C. Wiggins, Meghan A. Dunn, and George Cort

Reasons for the Survey

The idea for this survey originated at the Federal Judicial Center's July 2001 Research Conference on Courtroom Technology, due to a recognition that over the last ten years, many courts procured and funded technology in ways that made it difficult to track which courts had what technology. The survey is part of the Center's project to develop information to help judges handle electronic evidence as they preside over cases and to help Judicial Conference committees and others evaluate any need for rule and policy changes.

The Judicial Conference of the United States has taken several actions to encourage the use of technology in the federal courts. Most notably, in March 1999, it approved the Committee on Information Technology's recommendation to endorse the use of technologies in the courtroom and, subject to the availability of funds and committee priorities, to urge that (a) courtroom technologies—including video evidence presentation systems, videoconferencing systems, and electronic methods of taking the record—be considered as necessary and integral parts of courtrooms undergoing construction or major renovation; and (b) the same courtroom technologies be retrofitted into existing courtrooms or those undergoing tenant alterations as appropriate. (Report of the Proceedings of the Judicial Conference (Proceedings), March 1999, p.8). Previously, the Judicial Conference endorsed the use of real-time reporting technology by official court reporters in the district courts to the extent funding was available, (Proceedings, September 1994, p.49), and then videoconferencing as a viable optional case-management tool in prisoner civil rights pretrial proceedings (Proceedings, March 1996, p.14). Subsequently, spurred in part by the Prison Litigation Reform Act (42 U.S.C. §1997e§7(f)), the Court Administration and Case Management and the Committee on Information Technology established the Prisoner Civil Rights Conferencing Project, which has funded more than 58 videoconferencing sites in the district courts since 1996.

Survey Development and Administration

In May 2002, we sent an e-mail message to all district court clerks of court requesting that they or their designees complete an on-line questionnaire about the use of courtroom technology in their courts. The questionnaire (online at <http://156.132.47.230.8081/survey/ct.nsf/form>) sought information about a wide range of technologies, including those used in the courtroom during trials and evidentiary hearings, those designed to assist people with hearing, language or other impairments, those provided in ancillary spaces (areas of the courthouse other than courtrooms) and those available during jury deliberations. We asked about permanently installed technologies as well as technologies that may be shared between courtrooms or brought into courtrooms by attorneys, and the extent to which these technologies were used. Other questions addressed

training programs provided by the courts with regard to courtroom technology and the funding and procurement of the technology and its maintenance.

In addition, we collaborated with the Administrative Office on the content of the survey, and included questions several AO offices said would be useful in managing the Courtroom Technology Program. We also included some questions proposed by the Courtroom 21 Project of the William and Mary Law School and the National Center for State Courts. Courtroom 21, supported by a grant from the State Justice Institute, was evaluating the effect of jury room technologies and deliberations in traditional non-technological trials and high technology trials in both state and federal courts.

Ninety districts responded to the survey. Thirty-one districts responded to the survey by the initial due date and 41 responded after e-mail reminders in July and September 2002. At the request of the AO's Space and Facilities Division, we attempted to obtain responses from the remaining districts by sending out another reminder email, and heard from the last responding district in July 2003. Four districts did not respond.

Survey Responses

The numbers and percentages reported here should be used with caution, in part because the technology available in some districts in December 2003 may differ from what they reported in the questionnaire. Also, the districts completed the questionnaires at different times, some districts did not answer every question, and four did not respond at all. Although we use the present tense below—e.g., “courts have access”—the statement is accurate as of the dates of the survey submission. Unless otherwise noted, “districts” mean “responding districts.”

Question 1. Listed below are a number of technologies that can be permanently installed in courtrooms, shared between courtrooms, or brought into the courtroom by attorneys. For each technology, please indicate (1) in how many of your district's courtrooms, if any, the following technology is permanently installed; (2) whether the technology is shared between courtrooms and if so, the number of courtrooms with access to the shared equipment; and (3) finally, whether attorneys have brought any of the equipment into a courtroom within the past twelve months. We understand that your district most likely does not keep a record of when attorneys bring equipment into the courtroom; your best estimate in response to the third question is sufficient.

A large percentage of district courts have access to primary forms of advanced technology—either via a permanent installation in one or more courtrooms or equipment that is shared among courtrooms. Ninety-four percent have access to an evidence camera and 66% to a digital projector and projection screen; 93% to wiring to connect laptop computers; 57% to monitors built into the jury box; 77% to monitors outside the jury box; 89% to a monitor at the bench; 88% to a monitor at the witness stand; 88% to monitors at counsel table or lectern; 77% to monitors or screens targeted at the audience; 80% to a color video printer; 91% to annotation equipment; 95% to a sound reinforcement system; 92% to a telephone or infrared interpreting system; 92% to a kill switch and control system; 81% to an integrated lectern; 93% to audio-conferencing equipment; 85% to videoconferencing equipment; 81% to real-time software for use by court reporter; 74% to a real-time transcript viewer annotation system; and 66% to digital audio recording.

Similarly, a large percentage of district courts have permanently installed these technologies in at least one courtroom, but most have not permanently installed the equipment in the majority of their courtrooms. Only 21% of reported-on courtrooms have an evidence camera permanently installed; 10% have a digital projector and projection screen permanently installed; 27% have wiring to connect laptop computers; 12% have monitors built into the jury box; 18% have monitors outside the jury box; 33% have a monitor at the bench; 24% have a monitor at the witness stand; 25% have monitors at counsel table or lectern; 12% have a monitor or screen targeted at the audience; 16% have a color video printer; 24% have annotation equipment; 2% have a kill switch and control system; 16% have an integrated lectern; 53% have audio-conferencing equipment; 12% have videoconferencing equipment; 31% have real-time software for use by court reporter; 26% have a real-time transcript viewer annotation system; and 18% have digital audio recording. Most courtrooms (95%) have a sound reinforcement system and about two-thirds have either a telephone or infrared interpreting system.

Courts continue to provide access to more traditional technologies such as analog audiotape and videotape players, overhead projectors, and television sets.

Question 2. In approximately how many trials and evidentiary hearings has each of the following technologies been used during the past 12 months? In approximately how many other hearings and non-ceremonial court proceedings has each of the following technologies been used during the past 12 months? We understand that your district most likely does not keep a record of how often equipment is used. Your best estimate is sufficient.

We do not summarize the responses to this question because many districts do not record how often courtroom technology is used, and thus responses reflect the clerks' best estimates. Also, some districts did not provide a count of how often a technology had been used or provided an unquantifiable count (e.g., every day, every hearing), and other districts gave simply a lower bound (e.g., "100+").

Question 3. We are also interested in the technology in the ancillary spaces in your courthouse. Please indicate whether an audio system, audio feed, video-conferencing equipment and video-presentation equipment are available in the spaces listed below. If video-conferencing and presentation equipment are available in any of the spaces, please indicate whether it is permanently installed or shared with other spaces.

A relatively high number of districts did not provide information about certain technologies in certain ancillary spaces. Twenty-eight districts did not provide information about audio feeds in law clerks' offices and 16 districts did not provide information about video-presentation equipment in the video control room. Eleven or twelve districts did not provide information about audio systems in grand jury rooms, audio feeds in remote witness rooms, video-presentation equipment in jury assembly rooms, and videoconferencing equipment in overflow areas for courtrooms.

Audio-systems are fairly common in grand jury and jury assembly rooms. Sixty-two percent of districts reported that the grand jury room is equipped with an audio system and 56% report that the jury assembly room is so equipped.

Audio-feeds are also fairly common in several ancillary courthouse spaces, with 53% of districts reporting its availability in prisoner holding areas, 79% reporting its availability in one or more chambers, and 100% reporting its availability in law clerk offices. Audio-feeds were not commonly available in attorney/client rooms and remote-witness rooms. Many districts (28) failed to report on the availability of audio-feeds in law clerk offices, but all 62 districts that did provide the information reported that audio feeds were available.

Many districts appear to have planned for situations in which **videoconferencing equipment** might be needed in several ancillary courthouse spaces—judges’ conference rooms, other conference rooms, and training rooms. Although the equipment is generally not permanently installed in these areas, about 40% of the districts reported that it could be available on a shared basis. Also, about a fifth of the districts reported that videoconferencing equipment could be available on a shared basis in overflow areas for the courtroom.

Similarly, many districts seem to have anticipated the possible need for **video presentation equipment** in certain ancillary spaces. About 40-45% of the districts reported that evidence presentation equipment could be available on a shared basis in jury deliberation rooms and training rooms. Many districts also reported having it available in the jury assembly room, either on a permanent (35%) or shared basis (29%).

Question 4. Does your court have any full time employees whose primary responsibility is to assist with courtroom technology? If so, how many such employees does your court have?

About two-thirds of the districts do not have full-time employees to deal with courtroom technology. (26% have one full-time employee, 3% have two full time employees, and 2% have more than two full time employees.)

Question 5a. Does your court provide an orientation program to familiarize court staff and attorneys with the equipment and how it can be used during a court proceeding?

Question 5b. What instructional methods are used during the program? Check all that apply.

Question 5c. What types of instructional materials are provided at an orientation program or otherwise made available to court staff and attorneys? Check all that apply.

Question 5d. Does your court provide operator training to prepare court staff and attorneys to operate and maintain those systems they will be using during a court proceeding?

Question 5e. If yes, please indicate the type of training that is provided. Check all that apply.

Question 5f. Who provides this training?

Question 5g. Did the installer of the technology provide basic training to familiarize key court staff with the technology and how it works?

Question 5h. Did the installer of the technology provide advanced training to provide detailed information and hands-on practice to a core group of court staff responsible for maintaining the equipment, troubleshooting, and training others to operate the equipment?

Most districts (85%) provide an **orientation program** to familiarize court staff and attorneys with the equipment and how it can be used during a court proceeding. The districts providing such programs usually include demonstrations (99%), lectures (63%),

and less often, mock trials (15%) in their presentations, and provide a variety of instructional materials (handouts-86%; webpage-35%, videotape-8%, CD-3%).

Most districts (92%) also provide **operator training** to prepare court staff and attorneys to operate and maintain systems they will be using during court proceedings. This training is generally “hands-on” training after the orientation program (71%) and/or practice before court proceedings (80%). The training is provided most often by the courtroom deputy (31%), but is also commonly provided by a full-time employee who is responsible for assisting with courtroom technology (20%) or another automation or information technology employee (24%).

In most districts (94%), **installers of the technology** provided **basic training** to familiarize key court staff with the technology and how it works, and in about two-thirds of the districts, installers provided **advanced training** to provide detailed information and hands-on practice to a core group of court staff. (A relatively high number of districts, 9 and 10 districts respectively, did not answer the questions about installer-provided training.)

*Question 5i. How did your district **fund the technology** in the courtrooms about which you are providing information in this survey? Check all that apply.*

*Question 5j. How did your district **procure the technology** in the courtrooms about which you are providing information in this survey? Check all that apply.*

*Question 5k. How does your district **procure the maintenance** for the audiovisual equipment in the courtrooms about which you are providing information in this survey? Check all that apply.*

Question 5l. How much does your court spend annually for the maintenance of audiovisual equipment in the courtrooms about which you are providing information in this survey?

Question 5m. With what funds does your district maintain the technology in the courtrooms about which you are providing information in this survey?

Question 5n. How satisfied is your district with the services of the maintenance provider?

Districts have funded the technology in their courtrooms with a variety of funds (central – 78% of districts, local funds – 85%, circuit funds – 19%) and have procured the technology in various ways (local procurement – 51% of districts, GSA schedules – 43%, PMD delegation program – 43%; and centrally – 51%). Districts procure the maintenance of courtroom technology through local vendors (51% of districts), nationwide vendors (40%) and court staff (54%). We also asked districts how much they spent on technology maintenance, with what funds they pay these costs, and how satisfied they are with the maintenance-provider, but too many districts failed to answer these questions to permit a reliable summary statement.

Question 6. Please indicate whether the following devices are used in any of your courtrooms to assist people with hearing, language, or other impairments.

The majority of districts have at least some form of technology to assist people who are hearing impaired or who need foreign language interpretation. Seventy-five districts reported having either infrared hearing assistance devices (85% of districts), radio frequency hearing assistance devices (27%), TDD (10%), or real-time transcription for providing assistance to the hearing-impaired (35%). Seventy districts reported having either telephone interpreting systems (35% of districts) or infrared interpreting systems (71%).

Few districts reported having Braille readers.

Seventy-one percent of districts (56 of 79) report having special access to jury spaces for the physically disabled. A relatively high number of districts did not provide information about this issue— eleven districts that returned the questionnaire in addition to the four that did not.

Question 7. For each item below, please indicate whether jurors take the item into the jury deliberations room as a matter of course, whether it is available to jurors upon request, or whether it is never available to jurors. If the practice varies by judge, please select the option that describes the most common practice and use the comment section to explain how the practice differs among judges. Also, indicate whether party consent is required before each item is made available to jurors.

Many districts did not respond to questions 7 through 10, possibly because the clerks who responded to the questionnaire were unfamiliar with judicial practices or could not properly represent the varying practices of judges in their districts.

This question was included in the questionnaire for the benefit of the Courtroom 21 project regarding jury deliberations. Of most relevance here, most of the districts that provided information (51 of 68) reported that “equipment to view evidence and exhibits” is available to jurors on request, while three districts reported such equipment is available as a matter of course and fourteen districts reported that it is never available.

Question 8. In trials in which technology is used to present evidence, how do jurors usually view the evidence during deliberations?

Of the 69 districts that answered, two-thirds reported that jurors view most evidence in physical form in the deliberation room, but are brought into the courtroom to view or hear videotapes, audiotapes, and other electronic evidence; 16% reported that jurors both view most evidence in physical form and view or hear videotapes, audiotapes, and other electronic evidence in the deliberation room; 9% reported that jurors view most evidence using equipment in the deliberation room, and 9% reported that jurors are always brought into the courtroom when they ask to view evidence.

Question 9. Please indicate whether the following types of equipment and technology are available as needed for juror use during deliberations.

It appears that most districts do not make high-end technology available for jury room use; traditional equipment is more common. The most popular equipment available in jury rooms are pencil and paper (78 of 79 districts providing information), paper flip charts (68 of 75 districts) and calculators (59 of 69 districts). Many districts also make analog videotape and audiotape players available as needed (54 of 71 or 72 districts).

However, some districts would make high end technology available as needed for deliberations, including evidence cameras (20 of 70 districts providing information), laptop

or desktop computer for evidence retrieval and viewing (16 of 71 districts); individual juror monitors (9 of 74 districts) digital monitors for group use (21 of 75 districts), digital projectors and projection screens (20 of 75 districts), real-time transcripts (28 of 75 districts), and digital audio recording (16 of 66 districts). Thus, the potential exists in some districts for high technology jury deliberations.

Question 10. When equipment is required to view evidence during jury deliberations, who generally operates the equipment?

Of the 57 districts that implied using some type of equipment during juror deliberations, just over 60% use court personnel to operate the equipment (35 of 57). The remaining 22 districts allow jurors to operate the equipment.

Question 11. What type of technology is most needed in your court?

Fifty-six districts indicated the need for at least one piece of additional technology. The technological needs were wide-ranging and varied in the level of technological components. Evidence presentation systems—including evidence cameras, monitors, projectors, annotation equipment, and videotape players—were the most frequently mentioned item (by 35 of the 56 districts). Additionally, thirteen districts mentioned videoconferencing equipment, and three mentioned real-time court reporting. Audio systems were also a focus: seven districts reported the need for general audio system upgrades, seven mentioned digital audio recording, four mentioned interpreting devices, and three mentioned assisted listening technologies.